

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1 – 60 (Canceled)

61. (New) A communication device for communicating data over a power line having a voltage greater than one thousand volts, comprising:

a data signal impedance coupled to the power line;

a coupler comprising a first port and a second port wherein said first port is coupled to the power line on a first side of the data signal impedance and the second port of said coupler is coupled to the power line on the second side of the data signal impedance;

a modem communicatively coupled to said coupler;

a fiber optic transceiver communicatively coupled to said modem; and

a fiber optic cable communicatively coupled to said transceiver.

62. (New) The device of claim 61, further comprising a router in communication with said modem.

63. (New) The device of claim 62, wherein said router monitors usage data.

64. (New) A communication device for communicating data over a power line having a voltage greater than one thousand volts, comprising:

a capacitive coupler communicatively coupled to the power line;

a modem communicatively coupled to said coupler;

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a fiber optic transceiver communicatively coupled to said modem; and
a fiber optic cable communicatively coupled to said transceiver.

65. (New) The device of claim 64, further comprising a router in communication with said modem.

66. (New) The device of claim 65, wherein said router monitors usage data.

67. (New) A method of communicating data signals over a power line having a voltage greater than one thousand volts, comprising:

inductively coupling a first data signal from the power line;
demodulating the first data signal to provide first digital data;
modulating light with the first digital data to provide a second data signal; and
transmitting the second data signal through a fiber optic cable.

68. (New) The method of claim 67, comprising:

at a first location:

receiving a third data signal from a fiber optic cable;
demodulating the third data signal to provide second digital data;
modulating the second digital data to provide a fourth data signal; and
inductively coupling the fourth data signal to the power line.

69. (New) The method of 68, comprising:

at a second location:

inductively coupling the fourth data signal from the power line; and
demodulating the fourth data signal to provide a third digital data.

70. (New) A communication device for communicating over a power line carrying a power signal having a voltage greater than one thousand volts, comprising:

an inductive coupler to be communicatively coupled to the power line;
a modem communicatively coupled to said coupler; and
a fiber optic transceiver communicatively coupled to said modem;
a fiber optic cable communicatively coupled to said transceiver.

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71. (New) The device of claim 70, wherein said inductive coupler is comprised of a magnetically permeable material having an aperture through which the power line may traverse.

72. (New) The device of claim 70, wherein said inductive coupler comprises a toroid.

73. (New) The device of claim 70, wherein the coupler comprises a first portion coupled to a second portion via a hinge.

74. (New) The device of claim 70, further comprising a router in communication with said modem.

75. (New) The device of claim 74, wherein said router monitors usage data.

76. (New) The device of claim 70, further comprising an inductive power coupler configured to inductively couple power from the power signal carried by the power line.

77. (New) The device of claim 76, wherein said power coupler is electrically connected to said modem to provide power thereto.

78. (New) The device of claim 77, wherein said power coupler is electrically connected to said transceiver to provide power thereto.

79. (New) The device of claim 78, wherein said power coupler is connected to said modem through an AC-DC converter.

80. (New) A method of communicating data signals over a power line having a voltage greater than one thousand volts, comprising:

receiving a first data signal from a fiber optic cable;
demodulating the first data signal to provide first digital data;
modulating the first digital data to provide a second data signal; and
inductively coupling the second data signal to the power line.

81. (New) A communication device for communicating over a power line carrying a power signal having a voltage greater than one thousand volts, comprising:

a data coupler to be communicatively coupled to the power line;
a modem communicatively coupled to said coupler; and
a power coupler configured to inductively couple power from the power signal carried by the power line, wherein power from said power coupler powers said modem.

82. (New) The device of claim 81, further comprising a fiber optic transceiver communicatively coupled to said modem.

83. (New) The device of claim 82, further comprising a router communicatively coupled to said modem.

84. (New) The device of claim 81, wherein said data coupler is an inductive coupler.

85. (New) The device of claim 81, wherein said data coupler is a capacitive coupler.

86. (New) The device of claim 81, wherein said power coupler is comprised of a magnetically permeable material having an aperture through which the power line may traverse.

87. (New) The device of 86, wherein said coupler comprises a toroid.

88. (New) The device of claim 86, wherein the coupler comprises a first portion coupled to a second portion via a hinge.

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89. (New) The device of claim 81, further comprising a router in communication with said modem.

90. (New) The device of claim 89, wherein said router monitors usage data.

91. (New) The device of claim 83, further comprising a fiber optic cable communicatively coupled to said transceiver.
